

REMARKS

An Office Action was mailed on February 26, 2003. Claims 1 – 47 are pending in the present application. With this Response, Applicants amend the specification, amend FIG. 14, cancel claims 15 – 46, and amend claims 8 and 14. No new matter is introduced.

REJECTION UNDER 35 U.S.C. § 251

Claims 1 – 47 are rejected under 35 U.S.C. § 251 as being based on a defective reissue application. Applicants' cancel claims 15 – 46, and respectfully traverse this rejection.

35 U.S.C. § 251 provides in the following basis for reissuing a patent:

Whenever any patent is, through error without any deceptive intention, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent ...

(Emphasis added)

On April 17, 2001, in response to a Notice to File Missing Parts mailed on March 7, 2001, Applicants mailed a properly-formed re-issue application declaration by the inventors asserting a belief that the underlying issued patent (U.S. Patent No. 5,867,542) was wholly or partly inoperative or invalid, by reason of the patentee claiming more or less than he had the right to claim by failing to provide a generic claim to the various embodiments disclosed in the original patent.

The Examiner asserts that a failure to timely file a divisional application has been held as not considered to be an error causing a patent granted on elected to claims to be partially inoperative by reason of claiming less than Applicants had a right to claims (citing In re Watkinson, 900 F.2d 230, 14, U.S.P.Q.2d 1407 (Fed. Cir. 1990), In re Orita,

550 F.2d 1277, 193 U.S.P.Q. 145 (CCPA 1977) and In re Mead, 581 F.2d 251, 198 U.S.P.Q. 412 (CCPA 1978) for what has become known as “the Orita doctrine”).

In In re Doyle, the Federal Circuit clarified the limitations of the Orita doctrine by affirming that “the so-called *Orita* doctrine therefore precludes a reissue applicant from obtaining substantially identical claims to those of nonelected groups identified in an examiner’s restriction requirement when such claims could not have been prosecuted in the application from which they were restricted.” (In re Doyle, 293 F.3d 1355, U.S.P.Q.2d 1161 (Fed. Cir. 2002), emphasis added). Applicants acknowledge this affirmation, and cancel claims 15 – 46, which Applicants described in their Preliminary Amendment of January 26, 2001 as being substantially similar to restricted claims 15 – 46 of the original parent application, “with only the slightest non-substantive changes”.

However, Applicants respectfully submit that the Orita doctrine is not applicable to claims 1 – 14 and 47 of the present application. Claims 1 – 14 and 47 are neither identical nor substantially similar to nonelected claims 15 – 46 of the original parent application. In addition, as claims 1 – 14 are substantially similar to elected claims 1 – 14 in the original parent application, and claim 47 represents a linking claim that could have been prosecuted together with the elected claim group, each of claims 1 – 14 and 47 could have been prosecuted in the original patent application.

In Doyle, the Federal Circuit was presented with facts quite similar to those associated with the present application. Doyle received a restriction requirement in an original parent application, and elected one of nine identified claim groups for prosecution, canceling claims in the other restricted groups. Doyle failed to file divisional applications during the pendency of the original patent application. Doyle timely filed a request for broadening reissue with “linking” genus claims, and conceded that these

genus claims read on but were broader than any of the non-elected claims. On appeal, the Board of Patent Appeals and Interferences applying the Orita doctrine held Doyle's reissue declaration to be invalid.

However, in Doyle, the Federal Circuit overturned the Board's holding, holding that Doyle's declaration of failure to claim all that he was entitled to by failing to include genus claims that read on but are broader than the claims of non-elected groups was proper under 35 U.S.C. § 251. The court's opinion included the following rationale:

The linking claims here are obviously not of substantially similar scope as the nonelected species claims – they are quite significantly broader. More importantly, they could have been asserted along with the elected group because they read on the species of the elected group. Indeed, had Dr. Doyle not inadvertently neglected to assert the linking claims in his prosecution of the elected group, and had those claims been allowed, the examiner would have been required to lift the restriction requirement as to the other groups linked by the new claims and allow prosecution of those other groups. The MPEP expressly provides that “[I]f a linking claim is allowed, the examiner must examine the claims to the nonelected inventions that are linked to the elected invention by such allowed linking claim.” MPEP § 809.04 (emphases added). Viewed in this light, Dr. Doyle's failure to assert the linking genus claims truly was an error in the issued patent. It was not, as in In re Orita, merely an error pertaining to the prosecution (or lack thereof) of other, divisional applications directed towards the nonelected groups.

(Additional emphasis added)

Accordingly, Applicants respectfully submit that Applicants' reissue declaration as to claims 1 –14 and 47 is not defective under the holding of Doyle, and respectfully request that this rejection be withdrawn.

OBJECTION TO DRAWING

FIG. 14 objected to under 37 C.F.R. § 1.84(p)(5) for failing to include reference sign 307, which is mentioned in the specification at column 26, line 34. Applicants attach clean and marked-up versions of a proposed amended FIG. 14 to include reference sign

307. Accordingly, Applicants respectfully request approval of the proposed changes, and withdrawal of the drawing objection.

OBJECTIONS TO SPECIFICATION

The specification is objected to for a variety of informalities at columns 2, 4, 6, 23, 26 and 34. Applicants amend the specification to address these informalities, and respectfully request that the objection be withdrawn. No new matter is added.

OBJECTIONS TO CLAIMS

Claims 3 – 28, 30 – 32, 34 – 39 and 41 – 46 are objected to for various informalities. Applicants cancel claims ^{15?}3 – 28, 30 – 32, 34 – 39 and 41 – 46 without prejudice or disclaimer, and respectfully request that the objections be withdrawn. Claims 8 and 14 are amended to correct these informalities, and to correct several typographical errors. Applicants request clarification as to the Examiner's objection to claim 8 which was unclear to Applicants, and respectfully request that all claim objections be withdrawn.

REJECTIONS UNDER 35 U.S.C. § 112

Claims 16 – 21, 23 – 28, 34 – 39 and 41 – 46 are rejected under the first paragraph of 35 U.S.C. 112 as containing subject matter not described in the specification in such a way to enable one skilled in the art to make or use the disclosed invention. Claims 19, 24 – 27, 29 – 39 and 43 – 45 are rejected under the second paragraph of 35 U.S.C. 112 as being indefinite for failing to particularly point out and distinctly claim that which the inventors consider to be their invention. Applicants cancel claims 16 – 21, 23 – 28, 29 – 39 and 41 – 46 without prejudice or disclaimer, and respectfully request that the rejections be withdrawn.

REJECTIONS UNDER 35 U.S.C. §§ 102, 103

Claims 29 – 32, 40 – 42, 44 and 47 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,317,602 to Onoda et al. Claims 33, 35 and 37 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,438,591 to Oie et al. Claims 29 – 30, 40 – 42, and 47 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,535,252 to Kobayashi. Applicants cancel claims 29 – 33, 35, 37, 40 – 42 and 44 without prejudice or disclaimer, and respectfully traverse the rejections as to claim 47.

In independent claim 47, Applicants disclose a receiver circuit arranged in a receiving unit of multiplex radio equipment, comprising: a) an identifying circuit for identifying a demodulated signal at a predetermined identification level, the demodulated signal obtained by demodulating a multilevel orthogonal modulated signal, b) a clock regenerating circuit for regenerating a signal identification clock and supplying the regenerated signal identification clock to the identifying circuit, and c) a clock phase detecting section for detecting a phase component of the signal identification clock based on clock-phase-detecting composite input information including one of: i) a combination of a demodulated signal and an equalized demodulated signal, and ii) a combination of clock phase information to be supplied to the identifying circuit and signal error information obtained by the identifying circuit, and for then supplying the phase component to the clock regenerating circuit. The clock phase detecting section further includes: a) a difference detecting unit, responsive to the receipt of the composite input information, for detecting any one of: I) difference information between the demodulated signal and the equalized demodulated signal, and II) a combination of clock phase difference information and signal error differential information, and b) a clock phase

calculating unit for calculating the phase component of the signal identification clock based on the output from the difference detecting unit.

Onoda discloses a QPSK base-band delayed detector (see, e.g., FIG. 5 of Onoda). The detector of Onoda includes A/D converters 57, 58 for identifying and converting analog signals into digital signals and bit timing recovery (BTR) circuit 1 including phase comparison result detection unit 2 for detecting a phase component of the digital signals generated by converter 57, 58, and a digital PLL 3 for outputting a clock signal of appropriate phase. Unlike Applicants' claimed invention, however, Onoda fails to disclose that detection unit detects either of difference information between the demodulated signal and the equalized demodulated signal or a combination of clock phase difference information and signal error differential information.

Kobayashi discloses a DQPSK clock synchronization circuit (see, e.g., FIG. 2 of Kobayashi). The circuit of Kobayashi includes A/D converters 41, 42 for detecting and converting analog signals into digital signals, phase detector circuits 43, 45, 46 and 47 for detecting a phase error in the digital signals, and clock reproducer 48 for generating a clock signal m for A/D converters 41, 42. As in the case of Onoda, in sharp contrast to Applicants' claimed invention, Kobayashi fails to disclose that detector circuits 43, 45, 46 and 47 detect either of difference information between the demodulated signal and the equalized demodulated signal or a combination of clock phase difference information and signal error differential information.

Accordingly, Applicants respectfully submit that claim 47 is not anticipated by either of Onoda and Kobayashi, and is therefore allowable

CONCLUSION

An earnest effort has been made to be fully responsive to the Examiner's objections. In view of the above amendments and remarks, it is believed that 1 – 14 and 47, which include independent claims 1, 2, 8 and 47, and the claims that depend therefrom, stand in condition for allowance. Passage of this case to allowance is earnestly solicited. However, if for any reason the Examiner should consider this application not to be in condition for allowance, he is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Respectfully submitted,



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ENCLOSURE: Amended FIG. 14